

**Notice of Allowability**

Application No.

09/330,894

Examiner

Kim-Kwok CHU

Applicant(s)

ICHIMURA ET AL.

Art Unit

2653

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed on 7/7/04.
2. ☒ The allowed claim(s) is/are 1-3, 6, 7, 5, 8-17, 20, 21, 19, 22-24, 27, 28 and 26 which are renumbered as 1-25 respectively.
3. ☒ The drawings filed on 11 June 1999 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 8/20/04.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

**EXAMINER'S AMENDMENT**

1. An Examiner's Amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 C.F.R. 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the Issue Fee.
2. Authorization for this Examiner's Amendment was given in a telephone interview with Mr. Raymond F. Cardillo, Jr. on August 25, 2004.
3. In the claim:
  - (a) in claim 8, line 12, the term "cyclically moving" has been changed to --moving--;
  - (b) in claim 8, lines 17 and 18, the term "cyclic movement" has been changed to --movement--;
  - (c) in claim 9, line 2, the term "a cycle of the cyclic movement" has been changed to --the movement--;
  - (d) in claim 11, lines 2 and 3, the term "a cycle of the cyclic movement" has been changed to --the movement--;
  - (e) in claim 11, lines 3 and 4, the term "a cycle of the cyclic movement" has been changed to --the movement--; and
  - (f) in claim 23, line 2, the term "a cycle of the cyclic" has been deleted because this term is deleted in the independent

claim 22 by the Applicant.

***Allowable Subject Matter***

4. Claims 1-3, 5-17, 19-24, and 26-28 are allowable over the prior art of record.

5. The following is an Examiner's Statement of Reasons for Allowance based on Applicant's Amendment filed on June 22, 2004.

As in claim 1, the prior art of record fails to teach or fairly suggest an optical pickup means for making a light beam emitted from a light source incident on a recording medium via a two-group objective lens so as to record or reproduce optical information on or from the recording medium having the following means:

(a) a moving means for repeatedly moving at least one of the first lens and the second lens back and forth between two end positions along the common optical axis respectively nearer to and farther from the record medium, with each movement between the two end positions occurring over corresponding equal periods of time; and

(b) a control means for performing, upon a focusing operation after start up of focus control, a positional adjustment of the at least one of the first lens and the second lens to adjust the distance there between on the basis of changes

in the reproducing signals obtained at one or more positions of the at least one of the first lens and the second lens during the repeated movement thereof by the moving means.

As in claim 8, the prior art of record fails to teach or fairly suggests an optical information recording/reproducing apparatus having an optical pickup for making a light beam emitted from a light source incident on a recording medium via a two-group objective lens and at least a third lens so as to record or reproduce optical information on or from the recording medium. Furthermore a first drive means for integrally driving the first lens and the second lens in the direction of the optical axis; a second drive means for driving the third lens in the direction of the optical axis.

As in claim 15, the prior art of record fails to teach or fairly suggest an optical pickup means for making a light beam emitted from a light source incident on a recording medium via a two-group objective lens so as to record or reproduce optical information on or from the recording medium having the following means:

(a) a drive signal source configured to output a primary drive signal of a primary frequency and a secondary drive signal of a secondary frequency, the secondary frequency being of higher frequency than the primary frequency;

(b) a first drive actuator configured to be responsive to the primary drive signal to repeatedly move the primary lens in opposite directions along a direction of the common optical axis between two primary end positions respectively closer to and further from the recording medium;

(c) a second drive actuator configured to be responsive to the secondary drive signal to repeatedly move the secondary lens in opposite directions along a direction of an the common optical axis between two opposite secondary end positions respectively closer to and further from the recording medium; and

(d) a control circuitry configured to control a positional adjustment of at least one of the primary lens and the secondary lens position during a focusing operation occurring after start-up of focus control on the basis of changes in the reproducing signals obtained at one or more positions of the at least one of the primary lens and the secondary lens during the movement thereof along the common optical axis by a corresponding drive actuator.

As in claim 22, the prior art of record fails to teach or fairly suggest a method for making a light beam emitted from a light source incident on a recording medium via a two-group objective lens so as to record or reproduce optical information on or from the recording medium having the following steps:

(a) repeatedly moving at least one of the first lens and the second lens back and forth between two end positions along the common optical axis respectively nearer to and farther from the record medium, with each movement between the two end positions occurring over corresponding equal period of time; and

(b) performing, upon a focusing operation after start up of focus control, a positional adjustment of the at least one of the first lens and the second lens to adjust the distance therebetween on the basis of changes in the reproducing signals obtained at one or more positions of the at least one of the first lens and the second lens during the repeatedly moving step.

The features indicated above, in combination with the other elements of the claims, are not anticipated by, nor made obvious over, the prior art of record.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably **accompany** the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

7. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C.  
20231 Or faxed to:

(703) 872-9306 (for formal communications intended for  
entry. Or:

(703) 746-6909, (for informal or draft communications,  
please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park  
II, 2021 Crystal Drive, Arlington. VA., Sixth Floor  
(Receptionist).

Any inquiry of a general nature or relating to the status of  
this application should be directed to the Group receptionist  
whose telephone number is (703) 305-4700.

Any inquiry concerning this communication or earlier  
communications from the examiner should be directed to Kim CHU  
whose telephone number is (703) 305-3032 between 9:30 am to 6:00  
pm, Monday to Friday.

*kc 8/26/04*  
Kim-Kwok CHU  
Examiner AU2653  
August 26, 2004

(703) 305-3032

*William Korzuch*  
WILLIAM KORZUCH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600